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RSPA-2002-11989-9

**National Transportation Safety Board**

Washington, D.C. 20594

Office of the Chairman

JUN 14 2002

Dockets Management System
U.S. Department of Transportation
Room PL 401
400 Seventh Street, S.W.
Washington, D.C. 20590-0001

Dear Sir or Madam:

The National Transportation Safety Board has reviewed the Research and Special Programs Administration's (RSPA's) notice of proposed rulemaking (NPRM) "Hazardous Materials: Transportation of Lithium Batteries," Docket No. RSPA-02-11989 (HM-224C), which was published at 67 FR 15510 on April 2, 2002.

RSPA is proposing in the NPRM to amend the U.S. Department of Transportation (DOT) hazardous materials regulations regarding the transportation of lithium batteries in all modes. Under the NPRM, recent revisions to the United Nations Recommendations on the Transport of Dangerous Goods (UN Recommendations) would also be incorporated in the hazardous materials regulations. The revisions to the UN Recommendations include changes to the lithium battery testing criteria that were developed to minimize the possibility that lithium cells or batteries would become an ignition source during transport.

The NPRM states that the revisions to the UN Recommendations were developed in response to an incident involving lithium batteries at Los Angeles International Airport on April 28, 1999. Two pallets containing 120,000 small lithium batteries caught fire and burned after they were offloaded from a Northwest Airlines airplane from Osaka, Japan. Extinguishing the fire was difficult. Because of their small size and low lithium content, the batteries involved in this incident were excepted from the performance packaging, marking, and labeling requirements of the hazardous materials regulations and were not required to meet the testing criteria of the UN Recommendations. RSPA also notes in the NPRM that the incident at Los Angeles International Airport "highlighted the need for some kind of hazard communication to appear on the outside of the packages and on shipping documents and to increase the integrity of packages containing lithium batteries and cells."

The NPRM proposes that all lithium batteries, including small lithium batteries that are currently excepted from the hazardous materials regulations, be tested in accordance with the UN Recommendations and be designed or packed to prevent short circuits during transportation. The NPRM also proposes to replace current exceptions with more restrictive exceptions. Specifically, for small batteries and cells (as determined by lithium content), RSPA proposes requiring that each package containing more than 24 cells or 12 batteries (1) be marked to indicate that it contains lithium batteries:

(2) be accompanied by a document indicating that the package contains lithium batteries; (3) weigh no more than 30 kilograms (66 pounds); and (4) be capable of withstanding a 1.2-meter (4-foot) drop test in any orientation without shifting its contents in a way that would allow short-circuiting and without releasing its contents. The shipping document and the markings on the package would also have to indicate the special procedures to be followed if the package is damaged. Such shipments still would not be subject to the requirements for labeling, performance packaging, and shipping papers under the hazardous materials regulations.

The Safety Board investigated the lithium battery fire at the Los Angeles International Airport and issued five safety recommendations as a result. Safety Recommendation A-99-80 addresses the need to reduce the fire hazards from shipments of lithium batteries during air transportation, and Safety Recommendation A-99-82 addresses the need to alert cargo handlers to the hazards posed by lithium batteries.

Safety Recommendation A-99-80 urged RSPA, with the Federal Aviation Administration, to evaluate the fire hazards posed by lithium batteries in an air transportation environment and to require that appropriate safety measures be taken to protect aircraft and occupants. Further, the Safety Board specified that the evaluation should consider (1) the testing requirements in the UN Recommendations, (2) the involvement of packages containing large quantities of tightly packed batteries in a cargo compartment fire, and (3) the possible exposure of batteries to rough handling in an air transportation environment, including being crushed or abraded open.

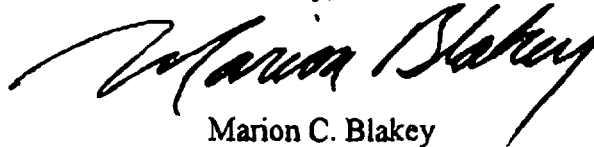
The Safety Board supports the proposals to require that all lithium batteries, including small batteries and cells that are currently excepted from the hazardous materials regulations, be tested in accordance with the revised UN Recommendations, and that packages containing more than 12 small batteries or 24 cells pass a drop test. Although these measures are responsive to element (1) of Safety Recommendation A-99-80, the NPRM does not propose standards that fully address elements (2) and (3) of the recommended evaluation. The Safety Board notes that RSPA is continuing its ongoing evaluation of the hazards posed by lithium batteries and will initiate additional actions as deemed necessary upon completion of the evaluation. The Safety Board urges RSPA to expedite its evaluation, giving specific attention to the potential involvement of packages with large quantities of lithium batteries in a cargo compartment fire on an airplane and to the potential exposure of lithium batteries to rough handling during air transportation.

Safety Recommendation A-99-82 asked RSPA to require that packages containing lithium batteries be identified as hazardous materials, including appropriate marking and labeling of the packages and proper identification in shipping documents when transported on aircraft. The NPRM proposes requirements that would enhance the identification of packages of lithium batteries and provide guidance if a package were damaged. However, the proposed requirements do not address the Safety Board's primary concern: that cargo handlers need to be properly alerted to the dangers posed by lithium batteries. If cargo handlers can see from shipping documents and the marking and labeling on the package that the contents contain a hazardous material, they are more likely to handle the package carefully. The Safety Board believes that the NPRM can be

improved by proposing that a package containing more than 12 small lithium batteries or 24 lithium cells be classified as a DOT class 9 miscellaneous hazardous material, which is subject to the requirements in the hazardous materials regulations for labeling of the package and shipping papers.

The Safety Board appreciates the opportunity to comment on this NPRM.

Sincerely,

A handwritten signature in black ink, appearing to read "Marion C. Blakey". The signature is fluid and cursive, with a large initial "M" and a long, sweeping underline.

Marion C. Blakey
Chairman